

**PAPER TRAY UNIT**  
**(Machine Code: A832/833)**

# 1. PRODUCT OVERVIEW

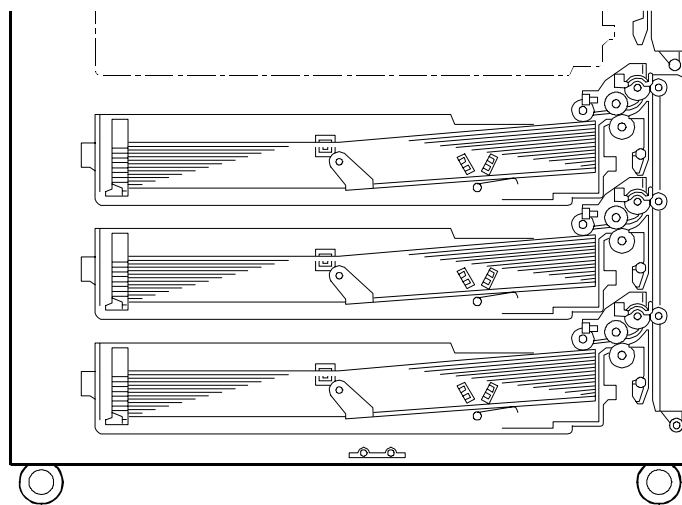
## 1.1 SPECIFICATIONS

Item	Specification	Remarks
Type	Front loading paper feed trays (A832: 2 trays, A833: 3 trays)	
Paper feed system	FRR system	
Paper size	A5 □ to A3 □ , HLT □ to DLT □	
Paper weight	64 to 105 g/m <sup>2</sup> , 17 to 28 lbs.	
Tray Capacity	500 sheets for each tray (100 g/m <sup>2</sup> , 26.6 lbs.) or Height up to 5.8 cm, 2.28"	
Anti-condensation heater	Option, powered directly by the main unit (EU/Asia: AC220 to 240V, 15W x 1, USA: AC120V, 15W x 1)	
Weight	A832: Approx. 32kg., 70.6 lbs. A833: Approx. 37kg., 81.6 lbs.	
Dimensions	A832/A833: 620x680x390mm, 24.5"x26.8"x15.4"	
Maximum Power Consumption	50W (The main frame supplies the power)	

## 1.2 COMPONENT DESCRIPTION

### 1.2.1 PAPER FEED MECHANISM

The paper feed units are the same for all trays (an FRR system is used).

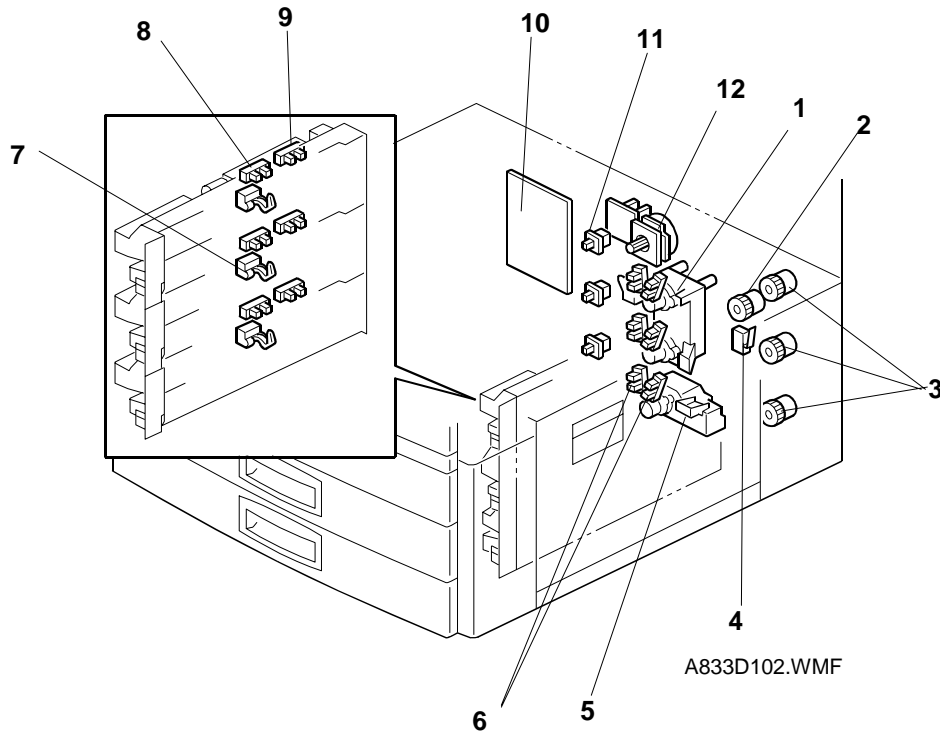


A833D101.WMF

Options

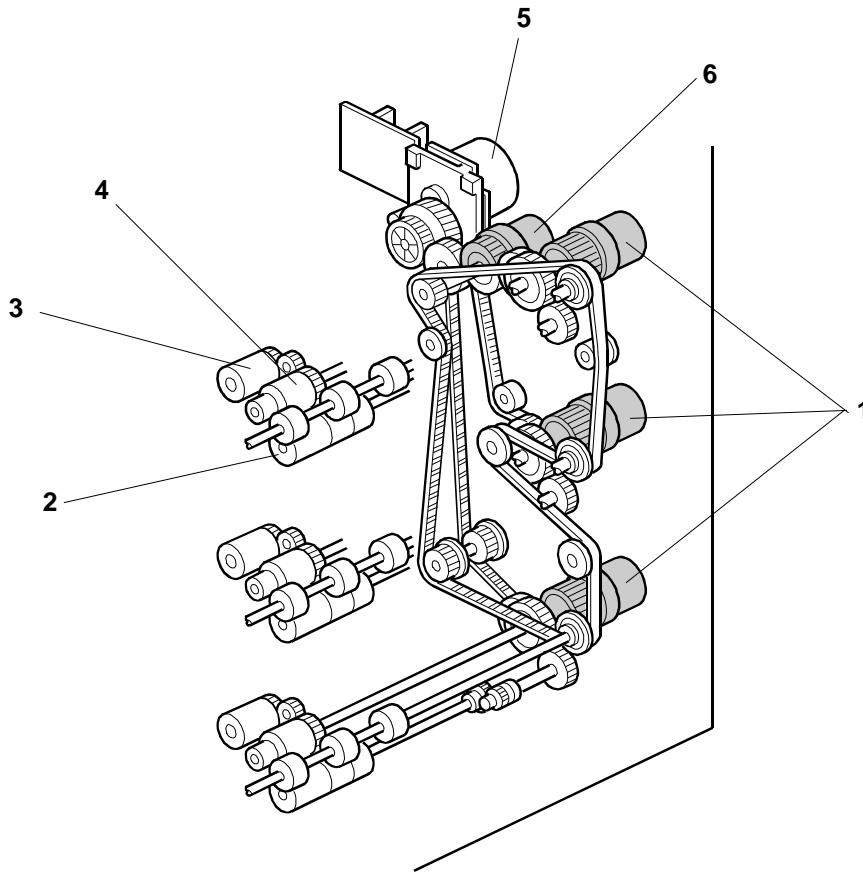
## 1.3 COMPONENT LAYOUTS

### 1.3.1 ELECTRICAL COMPONENT LAYOUT



- |   |                              |
|---|------------------------------|
| 1. Bottom plate lift motor 1                        | 7. Vertical transport switch |
| 2. Relay clutch                                     | 8. Paper end sensor          |
| 3. Paper feed clutches                              | 9. Upper limit sensor        |
| 4. Transport sensor                                 | 10. Main board               |
| 5. Bottom plate lift motor 2 (three-tray type only) | 11. Tray set sensor          |
| 6. Paper height sensors                             | 12. Bank paper feed motor    |

### 1.3.2 DRIVE LAYOUT



A833D103.WMF

1. Paper feed clutches
2. Separation roller
3. Pick-up roller
4. Paper feed roller
5. Bank paper feed motor
6. Relay clutch

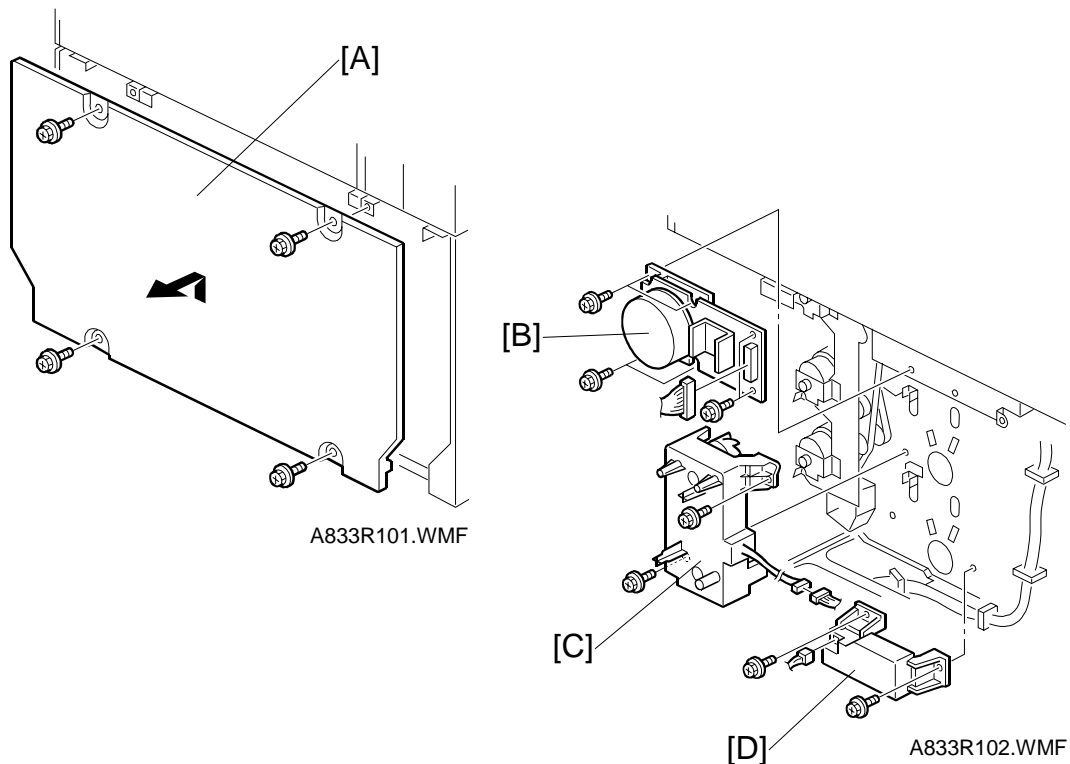
Options

## 2. DISASSEMBLY AND ADJUSTMENT PROCEDURES

### (1) Pick-up, paper feed, and separation rollers

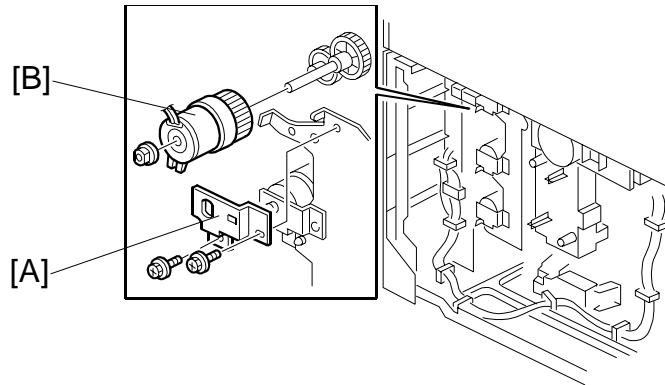
Replace the pick-up, paper feed, and separation rollers in the same way as for the main unit (see "Replacement and Adjustment - Paper Feed and Registration").

### (2) Bank paper feed and tray lift motors



1. Remove the rear cover [A] (4 screws).
2. Remove the bank paper feed motor assembly [B] (6 screws and 1 connector).
3. Remove bank tray lift motor 1 [C] (2 screws and 1 connector).
4. **Three-tray type only:** Remove bank tray lift motor 2 [D] (2 screws and 1 connector).

**(3) Paper feed clutch**

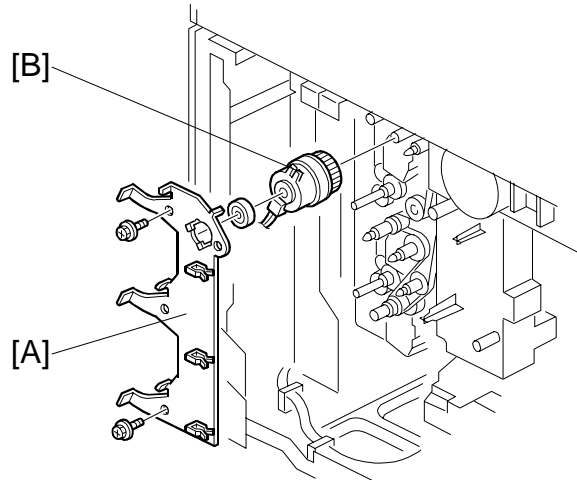


A833R103.WMF

The procedure is the same for each tray.

1. Remove the rear cover (4 screws).
2. Remove the solenoid clutch brackets [A] (2 screws each).
3. Remove the paper feed clutch [B] (1 bearing and 1 connector).

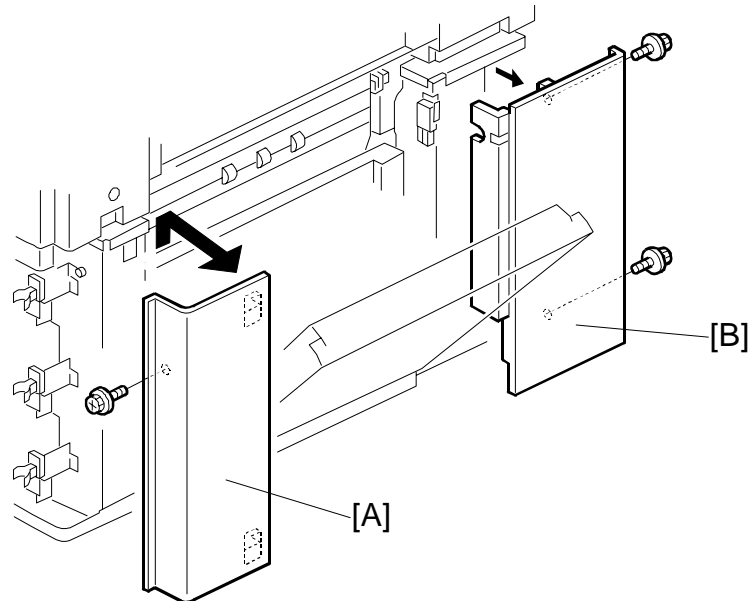
**(3) Relay clutch**



A833R104.WMF

1. Remove all paper feed clutches.
2. Remove the solenoid clutch bracket [A] (2 screws).
3. Remove the relay clutch [B] (1 bearing and 1 connector).

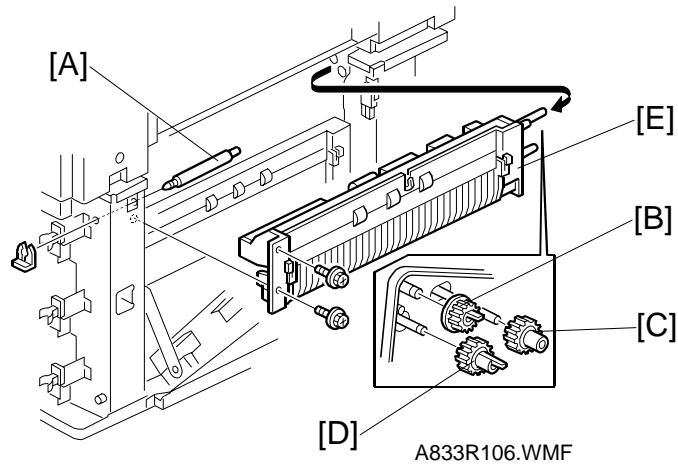
Options

**(4) Paper feed unit**

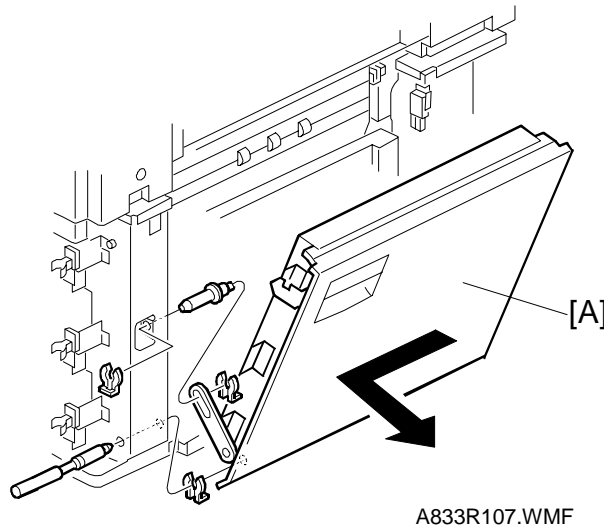
A833R105.WMF

1. Remove the upper front cover (2 screws).
2. Remove all trays.
3. A832 only: Remove the lower front cover (2 screws).
4. Remove the front right cover [A] (1 screw) for the bank.
5. Remove the rear right cover [B] (2 screws) for the bank.
6. Remove the solenoid clutch and bracket.

Continued on the next page

***First paper feed unit***

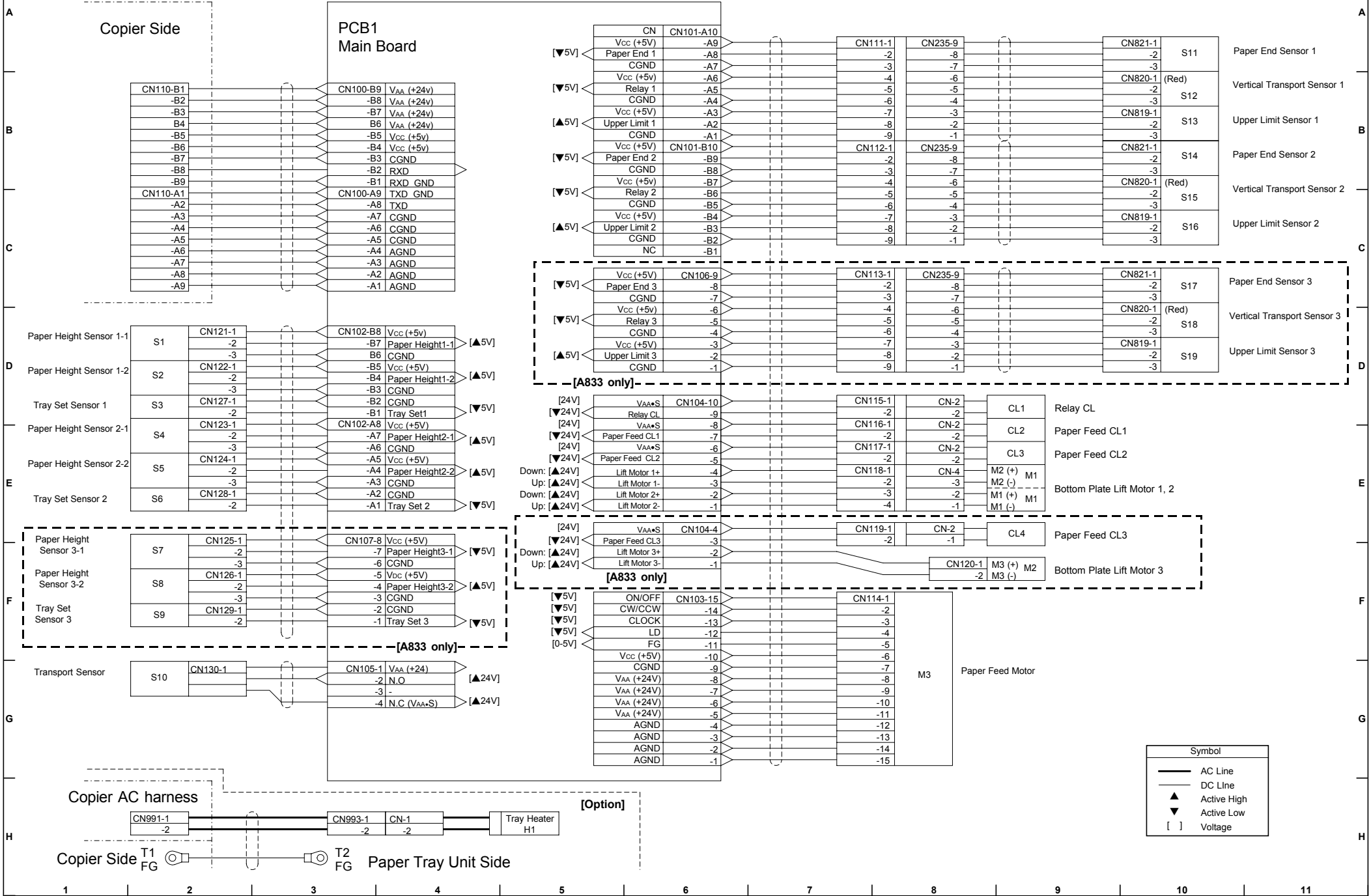
1. Remove the lock shaft [A] (1 snap-ring).
2. Remove the timing pulley [B], feed gear [C], and separator gear [D] from the rear.
3. Remove the first paper feed unit [E] (2 screws).

***Second and third paper feed units***

1. Remove the vertical transport guide plate [A] (2 shafts and 3 snap-rings).
2. Remove the gears in the same way as for the first paper feed unit, and then remove the paper feed unit.



# PAPER TRAY UNIT (A833/A832) POINT TO POINT DIAGRAM



CN110-B1		CN100-B9	V <sub>AA</sub> (+24V)
-B2		-B8	V <sub>AA</sub> (+24V)
-B3		-B7	V <sub>AA</sub> (+24V)
B4		B6	V <sub>AA</sub> (+24V)
-B5		-B5	V <sub>CC</sub> (+5V)
-B6		-B4	V <sub>CC</sub> (+5V)
-B7		-B3	CGND
-B8		-B2	RXD
-B9		-B1	RXD_GND
CN110-A1		CN100-A9	TXD_GND
-A2		-A8	TXD
-A3		-A7	CGND
-A4		-A6	CGND
-A5		-A5	CGND
-A6		-A4	AGND
-A7		-A3	AGND
-A8		-A2	AGND
-A9		-A1	AGND

▼5V	V <sub>CC</sub> (+5V)	CN101-A10	-A9	CN111-1	-2	CN235-9	-8	CN821-1	-2	S11	Paper End Sensor 1
	Paper End 1		-A8		-3		-7		-3		
	CGND		-A7		-4		-6	CN820-1	(Red)	S12	Vertical Transport Sensor 1
▼5V	V <sub>CC</sub> (+5V)	Relay 1	-A5		-5		-5		-2		
	CGND		-A4		-6		-4		-3		
▲5V	V <sub>CC</sub> (+5V)	Upper Limit 1	-A3		-7		-3	CN819-1		S13	Upper Limit Sensor 1
	CGND		-A2		-8		-2		-3		
	V <sub>CC</sub> (+5V)		-A1		-9		-1	CN821-1		S14	Paper End Sensor 2
▼5V	V <sub>CC</sub> (+5V)	Paper End 2	CN101-B10	CN112-1	-2	CN235-9	-8		-2		
	CGND		-B9		-3		-7		-3		
	RXD		-B8		-4		-6	CN820-1	(Red)		Vertical Transport Sensor 2
▼5V	V <sub>CC</sub> (+5V)	Relay 2	-B7		-5		-5		-2		
	CGND		-B6		-6		-4		-3		
▲5V	V <sub>CC</sub> (+5V)	Upper Limit 2	-B4		-7		-3	CN819-1		S15	Upper Limit Sensor 2
	CGND		-B3		-8		-2		-3		
	NC		-B2		-9		-1		-2		
			-B1						-3		

▼5V	V <sub>CC</sub> (+5V)	CN106-9	-8	CN113-1	-2	CN235-9	-8	CN821-1	-2	S17	Paper End Sensor 3
	Paper End 3		-7		-3		-7		-3		
	CGND		-6		-4		-6	CN820-1	(Red)	S18	Vertical Transport Sensor 3
▼5V	V <sub>CC</sub> (+5V)	Relay 3	-5		-5		-5		-3		
	CGND		-4		-6		-4		-2		
▲5V	V <sub>CC</sub> (+5V)	Upper Limit 3	-3		-7		-3	CN819-1		S19	Upper Limit Sensor 3
	CGND		-2		-8		-2		-3		
			-1		-9		-1		-2		

[24V]	V <sub>AA</sub> S	CN104-10	-9	CN115-1	-2	CN-2		CL1	Relay CL
▼24V	Relay CL		-8	CN116-1	-2			CL2	Paper Feed CL1
[24V]	V <sub>AA</sub> S		-7	CN117-1	-2			CL3	Paper Feed CL2
[24V]	V <sub>AA</sub> S	Paper Feed CL1	-6		-2				
▼24V	V <sub>AA</sub> S	Paper Feed CL2	-5	CN118-1	-2	CN-4		M2 (+)	Bottom Plate Lift Motor 1, 2
[24V]	Lift Motor 1+		-4		-3			M2 (-)	
▼24V	Lift Motor 1-		-3		-3			M1 (+)	
Up: ▲24V	Lift Motor 2+		-2		-2			M1 (-)	
Down: ▲24V	Lift Motor 2-		-1		-1				

[24V]	V <sub>AA</sub> S	CN104-4	-3	CN119-1	-2	CN-2		CL4	Paper Feed CL3
▼24V	Paper Feed CL3		-2		-1				
[24V]	Lift Motor 3+		-1						
Up: ▲24V	Lift Motor 3-								

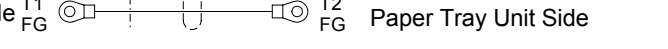
▼5V	ON/OFF	CN103-15	-14	CN114-1	-2	M3	Paper Feed Motor
▼5V	CW/CCW		-13		-3		
▼5V	CLOCK		-12		-4		
▼5V	LD		-11		-5		
	FG		-10		-6		
	V <sub>CC</sub> (+5V)		-9		-7		
	CGND		-8		-8		
	V <sub>AA</sub> (+24V)		-7		-9		
	V <sub>AA</sub> (+24V)		-6		-10		
	V <sub>AA</sub> (+24V)		-5		-11		
	AGND		-4		-12		
	AGND		-3		-13		
	AGND		-2		-14		
	AGND		-1		-15		

Paper Height Sensor 1-1	S1	CN121-1	-2	CN102-B8	V <sub>CC</sub> (+5V)	▲5V
			-3	B6	CGND	
Paper Height Sensor 1-2	S2	CN122-1	-2	-B5	V <sub>CC</sub> (+5V)	▲5V
			-3	-B4	Paper Height1-2	▲5V
Tray Set Sensor 1	S3	CN127-1	-2	-B3	CGND	▼5V
			-3	-B1	Tray Set1	
Paper Height Sensor 2-1	S4	CN123-1	-2	CN102-A8	V <sub>CC</sub> (+5V)	▲5V
			-3	-A7	Paper Height2-1	▲5V
Paper Height Sensor 2-2	S5	CN124-1	-2	-A6	CGND	
			-3	-A5	V <sub>CC</sub> (+5V)	▲5V
Tray Set Sensor 2	S6	CN128-1	-2	-A4	Paper Height2-2	▲5V
			-3	-A3	CGND	
			-4	-A2	CGND	
			-5	-A1	Tray Set 2	▼5V

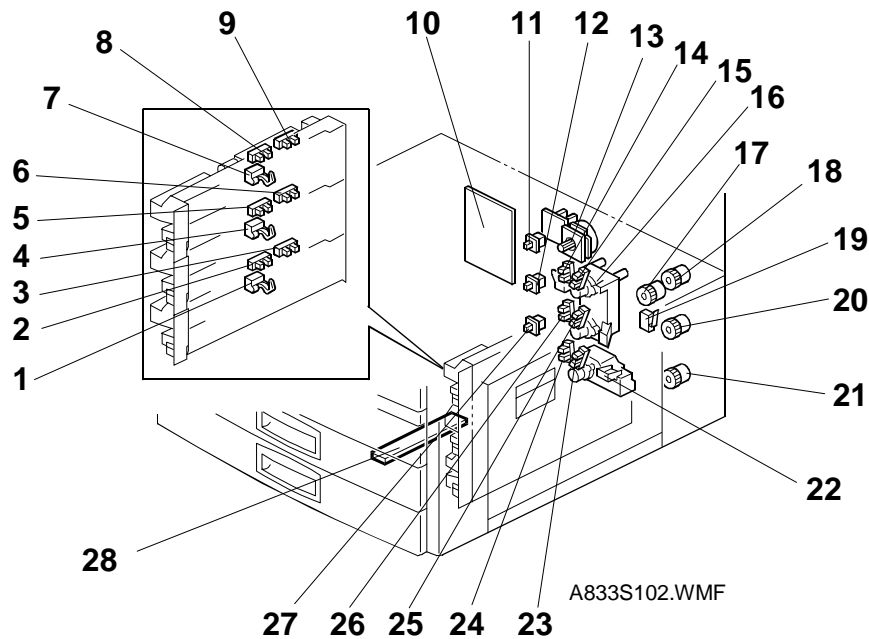
Paper Height Sensor 3-1	S7	CN125-1	-2	CN107-8	V <sub>CC</sub> (+5V)	▼5V
			-3	-7	Paper Height3-1	▼5V
Paper Height Sensor 3-2	S8	CN126-1	-2	-6	CGND	
			-3	-5	V <sub>CC</sub> (+5V)	▲5V
Tray Set Sensor 3	S9	CN129-1	-2	-4	Paper Height3-2	▲5V
			-3	-3	CGND	
			-4	-2	CGND	
			-5	-1	Tray Set 3	▼5V

Transport Sensor	S10	CN130-1	-2	CN105-1	V <sub>AA</sub> (+24)	▲24V
			-3	-2	N.O	
			-4	-3	-	
			-5	-4	N.C (V <sub>AA</sub> S)	▲24V

CN991-1	-2	CN993-1	-2	CN-1	-2	Tray Heater H1
---------	----	---------	----	------	----	----------------



## PAPER TRAY UNIT (A832/A833) ELECTRICAL COMPONENTS



Index No.	Description	Symbol	P-to-P	Note
1	Vertical Transport Sensor 3	S18	C10	A833 only
2	Paper End Sensor 3	S17	C10	A833 only
3	Upper Limit Sensor 3	S19	D10	A833 only
4	Vertical Transport Sensor 2	S15	B10	
5	Paper End Sensor 2	S14	B10	
6	Upper Limit Sensor 2	S16	C10	
7	Vertical Transport Sensor 1	S12	B10	
8	Paper End Sensor 1	S11	A10	
9	Upper Limit Sensor 1	S13	B10	
10	Main Board	PCB1	A3	
11	Tray Set Sensor 1	S3	D2	
12	Tray Set Sensor 2	S6	E2	
13	Paper Feed Motor	M3	G8	
14	Paper Height Sensor 1-2	S2	D2	
15	Paper Height Sensor 1-1	S1	D2	
16	Bottom Plate Lift Motor 1,2	M1	E9	
17	Relay Clutch	CL1	D9	
18	Paper Feed Clutch 1	CL2	E9	
19	Transport Sensor	S10	G2	
20	Paper Feed Clutch 2	CL3	E9	
21	Paper Feed Clutch 3	CL4	E9	A833 only
22	Bottom Plate Lift Motor 3	M2	F9	A833 only
23	Paper Height Sensor 3-1	S7	F2	A833 only
24	Paper Height Sensor 3-2	S8	F2	A833 only
25	Paper Height Sensor 2-1	S4	E2	
26	Paper Height Sensor 2-2	S5	E2	
27	Tray Set Sensor 3	S9	F2	A833 only
28	Tray Heater	H1	H5	Option